# CENTER FOR HARSH ENVIRONMENT ELECTRONICS

## CENTER

The Center for Harsh Environmental Electronics (formerly the Center for Flat Panel Displays) was established in 1995 to develop micro-miniature thermionic vacuum emitter (MTV) display panels. As the MTV technology has matured and initial option to license agreements were signed, the center has moved its focus to electronic circuits and devices for operation in high temperature operating environments.

## TECHNOLOGY

Harsh Environment Electronics is focused on the development of harsh environment electronics systems such as gallium arsenide-based electronics that operate at high temperatures, MTV electronics, and MTC electrical converters. The center also provides services in the following areas: prototype development and testing; development of high-temperature electronics based on MTV electronics technology; development of tools to test and evaluate flat panel display technologies; and work with industry (especially businesses located in Utah) in addressing and supporting their flat panel display technology needs. An enhanced flat panel display has been patented. A new company has been established with an option to license the flat panel display technology.

## ACCOMPLISHMENTS

The Center has continued collaboration with its first spin-off company in the development of the MTV flat panel display. The technology will compete in a huge world-wide market for displays and has great economic potential. A second spin-off, Innosys, was founded during the year and will continue the Center's work in harsh environment electronics. The Center for Harsh Environment Electronics was graduated at the end of the 2000 fiscal year.

## CONTACT

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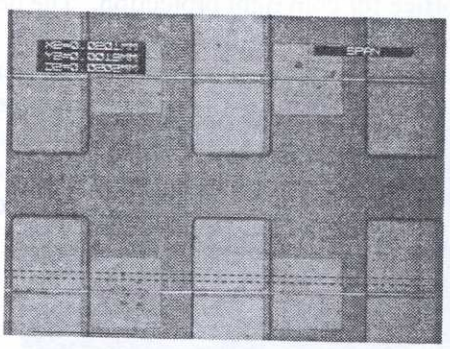
## *Can You Imagine...*

...electronics that operate at "red hot" temperatures which are highly efficient, high speed, reliable, and can be mass produced at low cost?

THE CENTER EXPLORES ELECTRONIC CIRCUITRY THAT WILL OPERATE RELIABLY IN EXTREME HIGH TEMPERATURE ENVIRONMENTS.



The picture is an array of high temperature gallium arsenide (GaAs) metal emitter field effect transistors (MESFETs).